LMA District Cover Sheet

Spring 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

| | Spring (March - May) | Summer ** (June - August) | Fall (September - November) | Winter ** (December - February) | | | | | | |
|--|--|------------------------------|-----------------------------|------------------------------------|--|--|--|--|--|--|
| * Overall LMA Rating (Fall Only) | | | | | | | | | | |
| | ** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating | | | | | | | | | |
| * SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. | | | | | | | | | | |
| | <u>FALL INSPECTIONS:</u> The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk. | | | | | | | | | |
| Comments | | | | | | | | | | |
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Unit Cover Sheet

Spring 2016 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles |
|---------------------------|-------|------------|
| Unit No. 01 Feather River | Right | 5.11 |

| | Spring (March - May) | Summer (June - August) | (September - November) Fall | Winter (December - February) |
|-------------------------------------|-------------------------|---------------------------|--------------------------------|---------------------------------|
| Unit Maintenance Rating (Fall Only) | | | | |
| Date of Inspection | 3/24/2016 - 3/30/2016 | | | |
| DWR Inspector | Sterling York | | | |
| Accompanied By | Steve Beckley | | | |

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | | Rating ** | Α | Issue No. | | 4 | |
|------------|---------------------------------|---------------|----------|------------|---------|------------|---|
| LM End | | Issue Type + | Ma | Location * | | N/A | |
| Category | Earthen L | evee | | GPS La | atitude | /Longitude | |
| Calegory | | | | | | End | |
| Item | Operations & Maintenance | | | | 0 | | 0 |
| пеш | Manuals | | | | 0 | | 0 |
| DWR ID | DWR ID DWR_MA0003_01_s _ 2013_4 | | | | | | |
| | | Comn | nent Cod | de | | | |
| | | | | | | | |
| | | | | | | | |
| | | Inspecto | or Comm | nent | | | |
| Sutter Yar | d has a co | py of the O&N | 1 manua | ls. | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

No Photos

| LM Start | | Rating ** | Α | Issue No. | | 6 | | | |
|----------|-------------------|----------------|----------|------------|--------------|-----|---|--|--|
| LM End | | Issue Type + | Ma | Location * | | N/A | | | |
| Category | Earthen L | evee | GPS La | atituc | de/Longitude | | | | |
| Category | | | | Start | | End | | | |
| Item | | cy Supplies & | | | 0 | | 0 | | |
| Item | Equipment | | | | 0 | | 0 | | |
| DWR ID | DWR_MA0 | 003_01_s _ 201 | 13_6 | | | | | | |
| | | Comn | nent Cod | de | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Inspector Comment | | | | | | | | |

The Sutter Yard has adequate flood fight supplies and equipment.

No Photos

| LM Start | | Rating ** | Α | Issue No. | | 7 | | |
|---------------|---------------------------------|--------------------------|-------------|------------|--------|--------------|---|--|
| LM End | | Issue Type + | Ма | Location * | | N/A | | |
| Earthen Levee | | | | GPS La | atitud | le/Longitude | | |
| Category | | Start | | End | | | | |
| Item | Flood Pre | paredness & ⁻ | Training | | 0 | | 0 | |
| item | | | | | 0 | | 0 | |
| DWR ID | DWR ID DWR_MA0003_01_s _ 2013_7 | | | | | | | |
| | | Comn | nent Cod | le | | | | |
| | | | | | | | | |
| | | | _ | | | | | |
| | | Inspecto | or Comm | ent | | | | |
| The Sutter | Yard has | received flood | d fight tra | ining. | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

No Photos

| * Location | ** Rating | | + Issue Type |
|-------------------------------------|--------------------------|---|-----------------------------------|
| LS : Land Side N/A : Not Applicable | A : Acceptable | N : Not Inspected/Rated | Ma : Maintenance Deficiancy |
| WS: Water Side | M : Minimally Acceptable | C : Corrected | Ob : Design & System Obsolescence |
| CR : Crown | U : Unacceptable | A/W : Acceptable but Monitor & Maintain | En: Enforcement |

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 0.01 | Rating ** | М | Issue No. | | 21 | | |
|----------------------------------|-----------|---------------|----------|--------------|-------------|---------------|--|--|
| LM End | 3.49 | Issue Type + | Ma | Location * | | WS | | |
| Earthen Levee | | | GPS La | atitud | e/Longitude | | | |
| Category | | | | Start | | End | | |
| Item | Vegetatio | n | | 38.8979 | 86° | 38.929237 ° | | |
| пеш | | | | -121.6178 | 09° | -121.588615 ° | | |
| DWR ID DWR_MA0003_01_s _ 2016_21 | | | | | | | | |
| | | Comn | nent Cod | le | | | | |
| V1 : Contro | | grass and wee | ds on th | e levee slop | oes a | and | | |
| | | Inspecto | or Comm | nent | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

No Photos

| LM Start | 0.05 | Rating ** | С | Issue No. | | 9 | |
|--|-------------------------------|----------------|-----|------------|--------|---------------|--|
| LM End | 0.05 | Issue Type + | Ma | Location * | CR | | |
| Category Earthen Levee | | | | GPS La | atitud | le/Longitude | |
| | | | | Start | | End | |
| Item | Crown Surface / Depressions / | | | | 78° | 38.897878 ° | |
| пеш | Rutting | | | -121.6170 | 88 ° | -121.617088 ° | |
| DWR ID | DWR_MA0 | 003_01_s _ 201 | 5_9 | | | | |
| Comment Code | | | | | | | |
| C2 : Repair depressions or ruts in the crown or slope. | | | | | | | |

Inspector Comment

No Photos

| LM Start | 0.33 | Rating ** | М | Issue No. | | 19 |
|----------|---------------|--------------|----|------------------------|-----|------------|
| LM End | 3.49 | Issue Type + | Ma | Location * | | LS |
| Category | Earthen Levee | | | GPS Latitude/Longitude | | |
| Calegory | | | | Start | | End |
| Item | Vegetation | | | 38.9000 | 54° | 38.929240° |
| пеш | | | | | | |

No Photos

DWR ID DWR_MA0003_01_s _ 2016_19

Comment Code

V1: Control annual grass and weeds on the levee slopes and easements

Inspector Comment

Location LS : Land Side N/A : Not Applicable WS: Water Side CR : Crown

Rating A : Acceptable
M : Minimally Acceptable
U : Unacceptable

-121.612805°

N: Not Inspected/Rated C : Corrected

-121.588615°

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 0.78 Rating ** M | | | Issue No. | | 140 |
|-----------------------------------|-------------------------|--------------|----|------------------------|-----|--------------|
| LM End | 0.78 | Issue Type + | Ma | Location * | LS | |
| Catagonia Earthen Levee | | | | GPS Latitude/Longitude | | |
| Calegory | Category | | | | | End |
| Item | Animal Co | ontrol | | 38.9033 | 39° | 38.903339° |
| пеш | | | | -121.60620 | 09° | -121.606209° |
| DWR ID DWR_MA0003_01_f _ 2014_140 | | | | | | |
| Comment Code | | | | | | |

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

There is a rodent hole on the landward toe road approximately 6" in diameter.

| LM Start | 0.78 | Rating ** | М | Issue No. | 140 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End | 0.78 | Issue Type + | Ма | Location * | LS |



This photo was taken from the landward levee slope near the toe road facing north looking at an approximately 6" rodent hole. Fall 2014.

Photo 2 of 2: SP_2016_MA0003_195_140_20160307_00012.jpg



This is another photo of the rodent hole to show its relationship to to levee toe, toe road, and drainage ditch. Fall 2014.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 0.81 | Rating ** | U | Issue No. | | 144 |
|----------|--------|------------------------|---|------------|------|---------------|
| LM End | 0.81 | 0.81 Issue Type + En | | Location * | | LS |
| Category | ental | GPS Latitude/Longitude | | | | |
| Calegory | | Start | | End | | |
| Item | DWR UC | IP Field Study | | 38.9032 | 64 ° | 38.903264 ° |
| пеш | | | | -121.6056 | 98 ° | -121.605698 ° |
| DWR ID | | | | | | |

Inspector Comment

Comment Code

FS_ID:48415 DS_ID:17091 EP_NO: 13624 Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 4/18/2016 No repairs have been made to the pipe yet.5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet.11/17/2014 Same as last inspection.5/14/2014 Pipe section that was suspected of leaking was dug up and deemed to be in good condition. No signs of leaks were found.10/30/2013 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. Hole in slope along outside of standpipe thats about 1 foot deep with moisture in the bottom. Dirt inside standpipe around siphon breaker also wet indicating there may be a leak. Need to investigate source or moisture.

FIELD_STRUCT_DESC: 20-inch steel drainage pipe through the levee 3 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Open on WS end. Pump in ditch on landside (LS). (Permit No. 13624-1983, Danna and Danna, Inc.) [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/22/2016 12:55:00 PM

| LM Start | 0.81 | Rating ** | U | Issue No. | 144 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End | 0.81 | Issue Type + | En | Location * | LS |

Photo 1 of 2: UCIP_SP_2016_48415_64654.jpg



Pump on concrete headwall at LS toe.

Photo 2 of 2: UCIP_SP_2016_48415_64653.jpg



Pipe at oulet on WS toe

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 0.81 | Rating ** | U | Issue No. | | 142 | |
|----------|--------------|----------------|----|------------|--------|--------------|--|
| LM End | 0.81 | Issue Type + | En | Location * | n* LS | | |
| Category | Supplemental | | | | atitud | e/Longitude | |
| Calegory | | | | Start | | End | |
| Item | DWR UC | IP Field Study | | 38.9032 | 64 ° | 38.903264° | |
| пеш | | | | -121.6056 | 98 ° | -121.605698° | |
| DWR ID | | | | | | | |

Comment Code

Inspector Comment

FS_ID:48094 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/18/2016 No repairs have been made to the pipe yet.5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.5/12/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop 10/10/2012 Flan gates not visible on waterward headwall and it

drop.10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall.

FIELD_STRUCT_DESC: 1 of 2. 18-inch drainage pipe through the levee, 32.0 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)].

FS Date: 4/22/2016 12:52:00 PM

| LM Start | 0.81 | Rating ** | U | Issue No. | 142 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End | 0.81 | Issue Type + | En | Location * | LS |

Photo 1 of 2: UCIP_SP_2016_48094_64649.jpg



Concrete headwall with walkway and slide gates at LS toe.

Photo 2 of 2: UCIP_SP_2016_48094_64648.jpg



Concrete U shaped headwall on WS toe filled in with Sandbags. 16-inch pipe shown over top of headwall.

Location Rating Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable WS: Water Side C: Corrected Ob: Design & System Obsolescence CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 0.81 | Rating ** | U | Issue No. | | 143 | | | |
|----------|--------------|-----------------|-----|-------------------------------|------|------------------------|--|----|--|
| LM End | 0.81 | Issue Type + En | | 0.81 Issue Type + En Location | | Location * | | LS | |
| Category | Supplemental | | | | | GPS Latitude/Longitude | | | |
| Calegory | gory | | | | | End | | | |
| Item | DWR UCI | 38.9032 | 64° | 38.903264 ° | | | | | |
| пеш | | | | -121.6056 | 98 ° | -121.605698 ° | | | |
| DWR ID | | | | | | | | | |

Inspector Comment

Comment Code

FS_ID:48414 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/18/2016 No repairs have been made to the pipe yet.5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels

drop.10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall.

FIELD_STRUCT_DESC: 2 of 2. 18-inch pipe through the levee, 32.0 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)]. FS Date: 4/22/2016 12:55:00 PM

| LM Start | 0.81 | Rating ** | U | Issue No. | 143 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End | 0.81 | Issue Type + | En | Location * | LS |

Photo 1 of 2: UCIP_SP_2016_48414_64662.jpg



Concrete headwall, slidegates, and metal walkway on LS toe.

Photo 2 of 2: UCIP_SP_2016_48414_64661.jpg



Concrete U shaped headwall on WS toe filled with sandbags.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 1.51 | Rating ** | М | Issue No. | | 13 | |
|----------------------------------|-------------|----------------|----------|-------------|-------------|--------------|--|
| LM End | 1.51 | Issue Type + | Ma | Location * | | CR | |
| Category | Earthen L | evee | | GPS La | atitud | e/Longitude | |
| Category | | | | Start | | End | |
| Item | Crown Su | ssions / | 38.9046 | 80° | 38.904680 ° | | |
| пеш | Rutting | Rutting | | | 229° | -121.594229° | |
| DWR ID DWR_MA0003_01_s _ 2015_13 | | | | | | | |
| | | Comn | nent Coo | le | | | |
| C2 : Repai | ir depressi | ons or ruts in | the crow | n or slope. | | | |
| | | | | | | | |
| Inspector Comment | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



Photo of a depression in the crown, taken looking at the landside.

| LM Start | 1.77 | Rating ** | М | Issue No. | | 14 |
|----------------------------------|--------------|--------------|------------------------|------------|------|---------------|
| LM End | 1.77 | Issue Type + | Ma | Location * | | LS |
| Category Earthen Levee | | | GPS Latitude/Longitude | | | |
| Calegory | | | | Start | | End |
| Item | Animal Co | ontrol | | 38.9070 | 25 ° | 38.907025 ° |
| item | item | | | -121.5903 | 75 ° | -121.590375 ° |
| DWR ID DWR_MA0003_01_s _ 2015_14 | | | | | | |
| | Comment Code | | | | | |

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 2.17 | Rating ** | М | Issue No. | | 145 |
|----------|--------------|----------------|----|------------|------|---------------|
| LM End | 2.17 | Issue Type + | En | Location * | | LS |
| Category | Supplemental | | | GPS Lat | itud | e/Longitude |
| Calegory | | | | Start | | End |
| Item | DWR UC | IP Field Study | | 38.91173 | 4 ° | 38.911734 ° |
| пеш | | | | -121.58610 | 6° | -121.586106 ° |
| DWR ID | | | | | | |

Inspector Comment

Comment Code

FS_ID:48417 DS_ID:17088 EP_NO: 3284

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch concrete irrigation culvert through the levee approximately 28 feet below the crown. Transition between vault on waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate on landside (LS) at concrete headwall. Flap gate in concrete vault on WS at terminal of pipes from pump structure in floodway. Pipes from pump station in creek be no longer connected. (Permit No. 3284) [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/22/2016 12:57:00 PM



32X32 box culvert on LS toe in Concrete U shaped channel with slide gate.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 2.17 | Rating ** | М | Issue No. | | 145 (cont) |
|--------------|--------|----------------|----|------------|------|--------------|
| LM End | 2.17 | Issue Type + | En | Location * | | LS |
| Category | | | | GPS Lat | itud | le/Longitude |
| Calegory | | | | Start | | End |
| Item | DWR UC | IP Field Study | | 38.91173 | 4 ° | 38.911734° |
| пеш | | | | -121.58610 | 6° | -121.586106° |
| DWR ID | DWR ID | | | | | |
| Comment Code | | | | | | |

Inspector Comment

FS_ID:48417 DS_ID:17088 EP_NO: 3284

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch concrete irrigation culvert through the levee approximately 28 feet below the crown. Transition between vault on waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate on landside (LS) at concrete headwall. Flap gate in concrete vault on WS at terminal of pipes from pump structure in floodway. Pipes from pump station in creek be no longer connected. (Permit No. 3284) [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/22/2016 12:57:00 PM



8-foot X 14-foot concrete box on WS toe with slide gate and 3 abandoned flap gates.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 2.18 | Rating ** | М | Issue No. | | 15 |
|----------------------------------|--------------|-------------------|---------------|-------------|---------------|-------------|
| LM End | 2.18 | Issue Type + | Ma | Location * | | LS |
| Category | Earthen L | evee | | GPS La | atitud | e/Longitude |
| Calegory | | | | Start | | End |
| Item | Trim / Thi | Trim / Thin Trees | | | 69° | 38.911869° |
| пеш | | | -121.586093 ° | | -121.586093 ° | |
| DWR ID DWR_MA0003_01_s _ 2015_15 | | | | | | |
| | | Comn | nent Cod | le | | |
| T1: Trim t | rees to at l | east five feet | above g | round level | | |
| | | | | | | |
| Inspector Comment | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

No Photos

| LM Start | 2.18 | Rating ** | A/W | Issue No. | | 18 | |
|----------------------------------|-------------------------|-----------|------------------------|------------|------|---------------|--|
| LM End | nd 2.18 Issue Type + Ma | | Location * | LS | | | |
| Category Earthen Levee | | | GPS Latitude/Longitude | | | | |
| Calegory | Salegory | | | Start | | End | |
| Item | Animal Control | | | 38.91186 | 69° | 38.911869° | |
| пеш | item | | | -121.58609 | 93 ° | -121.586093 ° | |
| DWR ID DWR_MA0003_01_s _ 2015_18 | | | | | | | |
| Comment Code | | | | | | | |

No Photos

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

| LM Start | 2.19 | Rating ** | С | Issue No. | | 141 | |
|-----------------------------------|--------|--------------|-------------|------------|------|-------------|---|
| LM End | 2.19 | Issue Type + | En | Location * | | LS | |
| Category | GPS La | atitud | e/Longitude | | | | |
| Category | | | | Start | | End | |
| Encroachments Encroachments | | | | 38.9120 | 27° | 38.912027 | 0 |
| пеш | " | | | | 41 ° | -121.585941 | 0 |
| DWR ID DWR_MA0003_01_f _ 2014_141 | | | | | | | |
| | | Comn | nent Cod | le | | | |
| PR : Pruni | ngs | | | | | | |
| | | | | | | | |
| Inspector Comment | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

No Photos

| * Location | ** Rating | | + Issue Type |
|-------------------------------------|--------------------------|---|-----------------------------------|
| LS : Land Side N/A : Not Applicable | A : Acceptable | N : Not Inspected/Rated | Ma : Maintenance Deficiancy |
| WS : Water Side | M : Minimally Acceptable | C : Corrected | Ob : Design & System Obsolescence |
| CR : Crown | U : Unacceptable | A/W : Acceptable but Monitor & Maintain | En: Enforcement |

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 3.20 | Rating ** | M | Issue No. | | 20 | |
|----------------------------------|-------------|--------------|----------|------------|--------|---------------|--|
| LM End | 3.20 | Issue Type + | Ma | Location * | LS | | |
| Category | Earthen L | evee | | GPS La | atitud | le/Longitude | |
| Calegory | | | | Start | | End | |
| Item | Slope Sta | bility | | 38.9259 | 09° | 38.925909° | |
| пеш | | | | -121.5854 | 01° | -121.585401 ° | |
| DWR ID DWR_MA0003_01_s _ 2015_20 | | | | | | | |
| | | Comn | nent Cod | le | | | |
| S1 : Repai | r slope ins | tability. | | | | | |
| | | | | | | | |
| | | Inspecto | or Comm | nent | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Photo 1 of 1: SP_2016_MA0003_195_20_20160307_00010.jpg



Photo of slope on the landside faceing upstream, areas with little vegetation appear to have eroded leaving the crown smaller.

| LM Start | 3.75 | Rating ** | М | Issue No. | | 12 |
|----------------------------------|------------|--------------|--------|--------------|------|---------------|
| LM End | 4.47 | Issue Type + | Ма | Location * | | LS |
| Catagony | evee | GPS La | atitud | le/Longitude | | |
| Calegory | Category | | | | | End |
| Item | Vegetation | | | | 57° | 38.942033 ° |
| item | | | | -121.5910 | 31 ° | -121.587681 ° |
| DWR ID DWR_MA0003_01_s _ 2016_12 | | | | | | |

Comment Code

V1: Control annual grass and weeds on the levee slopes and easements

Inspector Comment



Vegetation on the landside looking downstream.

| LM Start | 3.75 | Rating ** | М | Issue No. | | 17 |
|----------------------------------|-----------|-----------------|-------------|-------------|-----|-----------|
| LM End | 4.47 | Issue Type + Ma | | Location * | | WS |
| Category | GPS La | titud | e/Longitude | | | |
| Calegory | | | | Start | | End |
| Item | Vegetatio | n | | 38.93215 | 57° | 38.942039 |
| пеш | | -121.59103 | 31 ° | -121.587680 | | |
| DWR ID DWR_MA0003_01_s _ 2016_17 | | | | | | |

Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment



Vegetation on waterside looking downstream.

| * Location | ** Rating | | + Issue Type |
|--|--|---|--|
| LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 3.78 | Rating ** | М | Issue No. | | 146 |
|----------|----------------------|------------------------|----|------------|------|---------------|
| LM End | 3.78 | Issue Type + | En | Location * | | WS |
| Category | ental | GPS Latitude/Longitude | | | | |
| Calegory | | | | Start | | End |
| Item | DWR UCIP Field Study | | | | 82 ° | 38.932482 ° |
| пеш | | | | -121.5910 | 05 ° | -121.591005 ° |
| DWR ID | | | | | | |

Comment Code

Inspector Comment

FS_ID:48421 DS_ID:17087 EP_NO: 1730

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/18/2016 Big depression on LS toe along the pipe alignment. 5/12/2015 Crossing appears to be in good condition. No noticeable issues to report.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.

FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.5 feet below the crown. Gate valve and pump located on the waterside (WS). 24-inch concrete standpipe located on the landside (LS) toe has been degraded to ground elevation and filled in with soil. Pipe remains intact. Steel tower over pump on is located on the WS. (Permit No. 1730, 1959-Robert L. Crandall). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/22/2016 1:02:00 PM

| LM Start | 3.78 | Rating ** | М | Issue No. | 146 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End | 3.78 | Issue Type + | En | Location * | WS |

Photo 1 of 2 : UCIP_SP_2016_48421_64672.jpg



Pipe, pump, and tower on WS slope/toe.

Photo 2 of 2: UCIP_SP_2016_48421_64671.jpg



Pipe at LS shoulder showing exposed concrete cutoff wall.

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 4.15 | Rating ** | М | Issue No. | 1 | | |
|---------------------------------|--------------|---------------|--------------|------------|------|---------------|--|
| LM End | 4.18 | Issue Type + | Ma | Location * | WS | | |
| Category | GPS La | tituc | le/Longitude | | | | |
| Calegory | Calegory | | | | | End | |
| Item | | ACE Erosion S | Survey, | 38.9374 | 51 ° | 38.937937 ° | |
| item | DRAFT | | | -121.5885 | 12 ° | -121.588471 ° | |
| DWR ID DWR_MA0003_01_s _ 2016_1 | | | | | | | |
| | Comment Code | | | | | | |

Inspector Comment

2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_R]

| LM Start | 4.15 | Rating ** | М | Issue No. | 1 (cont) |
|----------|------|--------------|----|------------|----------|
| LM End | 4.18 | Issue Type + | Ma | Location * | WS |



USACE 2013 Photo #1

Photo 2 of 2: SP_2016_MA0003_195_1_20160307_00002.jpg



USACE 2013 Photo #2

Photo 1 of 2: SP_2016_MA0003_195_2_20160307_00003.jpg

| LM Start | 4.71 | Rating ** | М | Issue No. | | 2 | |
|---------------------------------|-------|---------------|---------|--------------|------|--------------|--|
| LM End | 4.76 | Issue Type + | Ma | Location * | WS | | |
| Category | ental | GPS La | titud | le/Longitude | | | |
| Calegory | | Start | | End | | | |
| Item | | ACE Erosion S | Survey, | 38.94518 | 88° | 38.945958 ° | |
| item | DRAFT | | | -121.58609 | 96 ° | -121.586394° | |
| DWR ID DWR_MA0003_01_s _ 2016_2 | | | | | | | |
| Comment Code | | | | | | | |

Inspector Comment

2013 - Minor toe scour causing gradual erosion into the bank slope. 2015: Last observed in 2013. [2015 Site ID: FHR_12-8_R]



USACE 2013 Photo #1

| * Location | ** Rating | | + Issue Type |
|--|--|---|--|
| LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

Levee Inspection Report By Mile - Spring 2016

Sutter Maintenance Yard Maintenance Area 0003

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|---------------------------|-------|------------|--------------------------|------------------|
| Unit No. 01 Feather River | Right | 5.11 | 03/24/2016 03/30/2016 | Sterling York |

| LM Start | 4.71 | Rating ** | М | Issue No. | 2 (cont) | | | |
|--|--------------------------|--------------|------------------------|---------------|----------|-------------|--|--|
| LM End | 4.76 | Issue Type + | Ma | Location * | WS | | | |
| Supplemental | | | GPS Latitude/Longitude | | | | | |
| Category | | Start | | End | | | | |
| 2015 USACE Erosion Survey, | | | Survey, | 38.945188° | | 38.945958 | | |
| пеш | DRAFT | | | -121.586096 ° | | -121.586394 | | |
| DWR ID | DWR_MA0003_01_s _ 2016_2 | | | | | | | |
| Comment Code | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Inspector Comment | | | | | | | | |
| 2013 - Minor toe scour causing gradual erosion into the bank slope. 2015: Last observed in 2013, I2015 Site ID: FHR 12-8, RI | | | | | | | | |

Photo 2 of 2 : SP_2016_MA0003_195_2_20160307_00004.jpg

USACE 2013 Photo #2